

The dynamics of variation and change in northern British English back vowels

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*A Comparative Study of Language Change in
Northern Englishes (2008-13)*

ESRC: RES-061-25-0033

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New Ways of Analyzing Variation
nju weiz av 'ænl,aizin , væri'eisən

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1. Introduction

- fronting of **GOOSE** (/u:/) and **GOAT** (/ow/ ~ /əʊ/)
- noted across varieties of English worldwide

Britain	Henton 1983, Bauer 1985, Watt 2000, Watt & Tillotson 2001, Hawkins & Midgley 2005, Kerswill & Williams 1999, 2005, Ferragne & Pellegrino 2010, Jansen 2010, Flynn 2012, <i>inter alia</i> .
US	Labov 1994, Clarke et al 1995, Anderson & Milroy 1999, Thomas 2001, Baranowski 2008, Fridland and Bartlett 2006, Fridland 2008, Hall-Lew 2009, Fought 2009, Koops 2010, <i>inter alia</i> .
South Africa	Mesthrie 2010
Australia	Cox 1996
New Zealand	Easton & Bauer 2000

1. Introduction

- “Off the shelf” change (Milroy 2007, Fridland 2008). Fronted GOOSE covering ‘90% of the North American continent’ (Labov 2008: 27)
- Labov (1994): Principle III of vowel change
- some consistent patterns of variation
 - linguistic: in chain shifts, GOAT fronting generally parasitic on GOOSE fronting
 - social: led by young speakers and females (at least for GOAT; Hall-Lew 2004, Baranowski 2008)

1. Introduction

- but is it the ‘same’ change across the English-speaking world?
- some evidence of differences reported in:
 - social constraints on variation and transmission of change
 - phonetic implementation

1. Introduction

linguistic constraints

- /l/ fronting in southern US & Liverpool, UK
- /l/ fronting prohibited elsewhere
- Newcastle, UK: GOAT fronting **without** GOOSE fronting
(Watt 2002)

1. Introduction

phonetic implementation

GOOSE

- US: fronting in nucleus (Hall-Lew 2009, Koops 2010)
- GB & rural southern US: fronting of whole vowel (Kerswill & Williams 2005, Koops 2010)

GOAT

- US/GB = fronting in the off-glide (Kerswill & Williams 2005)

1. Introduction

The present study:

- (i) how is the fronting of GOOSE/ GOAT implemented phonetically in northern British English?
- (ii) what are the social correlates?
- (iii) what is the articulatory basis of fronting?
- (iv) are internal and external constraints the same across communities? if not, how might we explain the differences?

2. Data

Manchester

- recorded in 2008
- conversation data in peer-group pairs
- 27-52 tokens per speaker per vowel

	Male	Female
Young (18-21)	4	4
Older (62-82)	4	4



2. Data

York

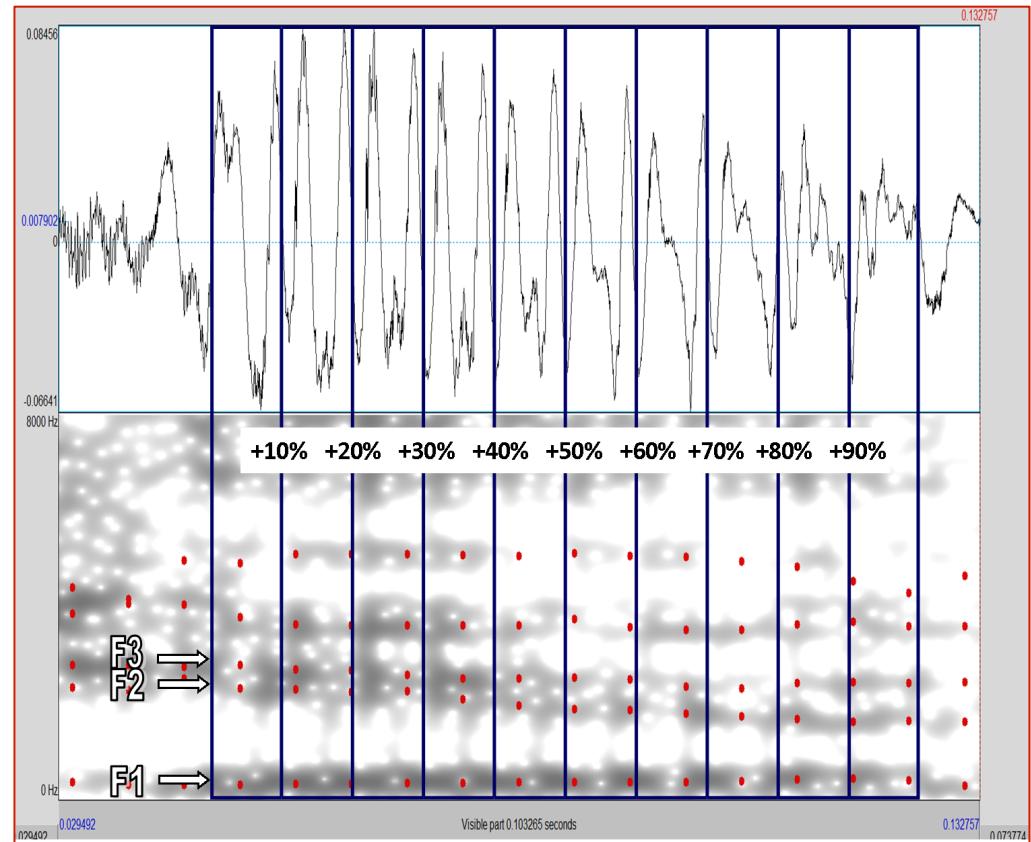
- young speakers (NE project 2008)
- older speakers (Tagliamonte, 1998)
- c. 40 tokens per speaker

	Male	Female
2008, younger	8	10
1998, older	8	8



3. Method

- manual segmentation
- Praat script extracted 9 time-normalised values from formant trajectories (McDougall 2004)

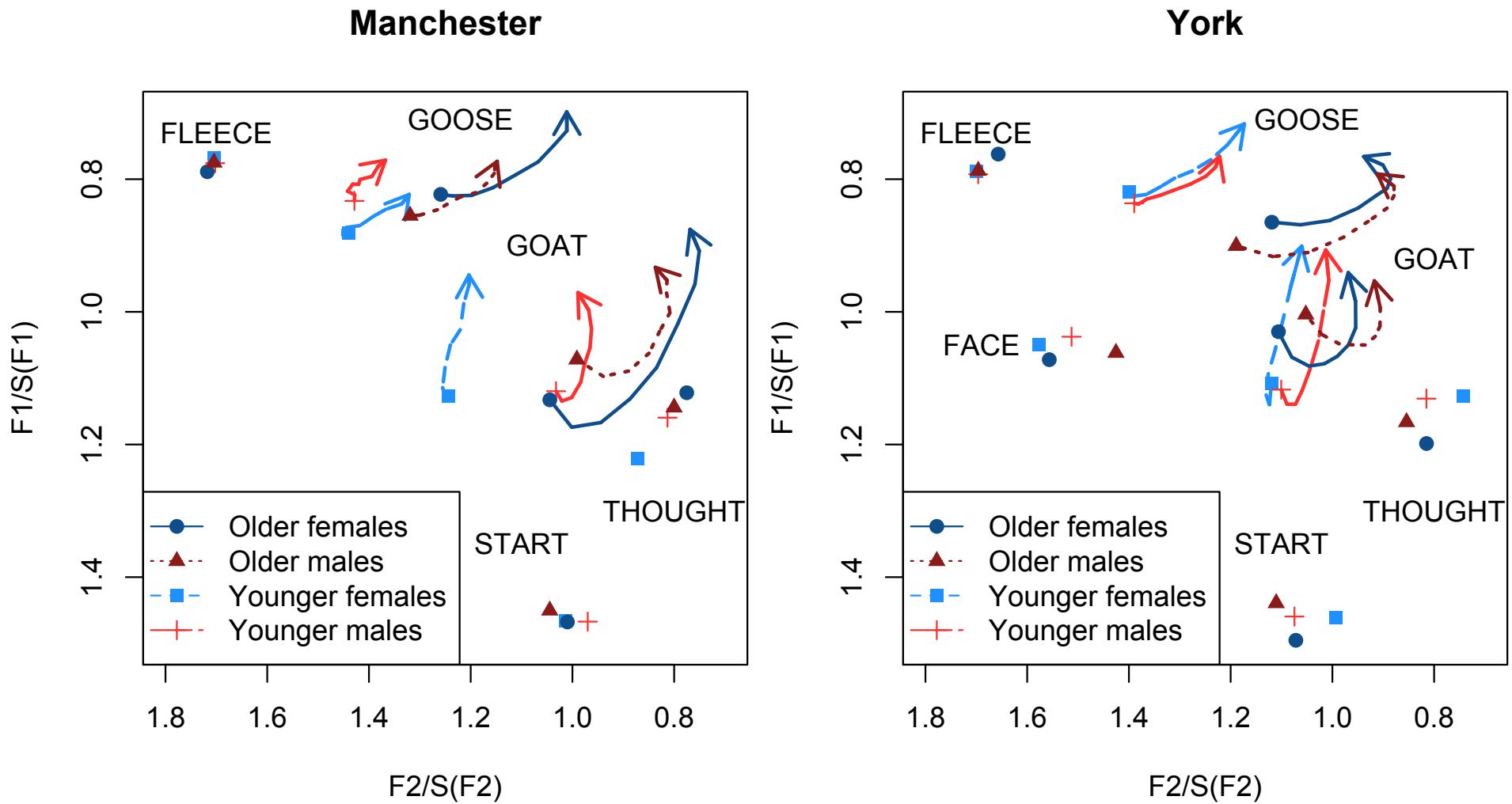


- **Manchester** = F1, F2 and F3; **York** = F1 and F2
- formant values normalised using modified Watt & Fabricius method using *Vowels* package in R (Kendall & Thomas 2012)

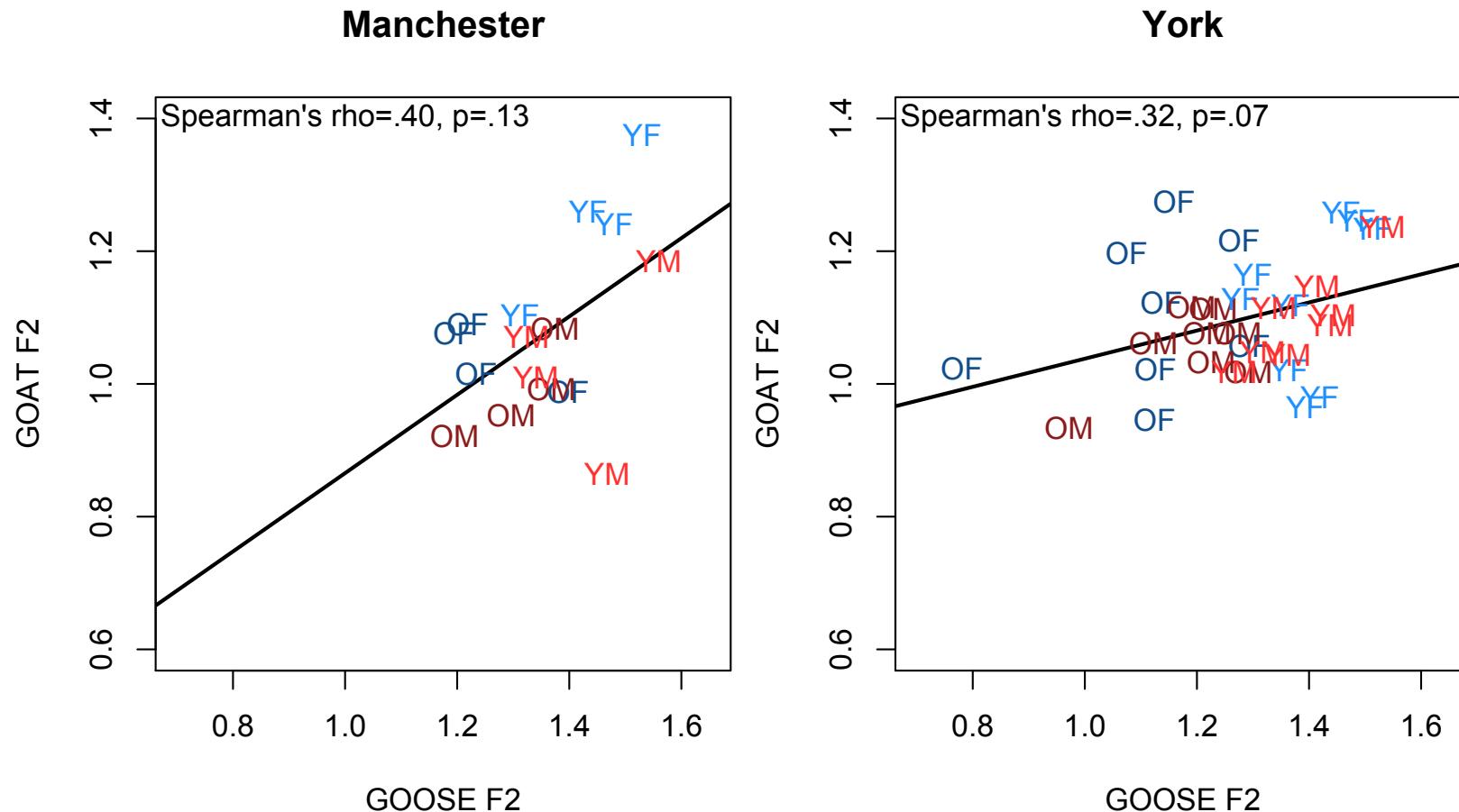
3. Method

- **Analysis:** lmer models (lme4)
- **Predictors**
 - **Dep. Variable:** F2 at maximum measurement point
 - **Fixed effects:**
 - Community (York vs. Manchester)
 - Age group (older vs. younger)
 - Speaker sex
 - lexical competitor, GOAT: (FACE, NURSE, DRESS), GOOSE: (FLEECE, KIT)
 - Vowel duration (logs)
 - Euclidean distance (logs)
 - Following & preceding voicing/manner/POA
 - **Random intercepts:**
 - speaker
 - lexical root

4 Results: Dynamic F1~F2 plots



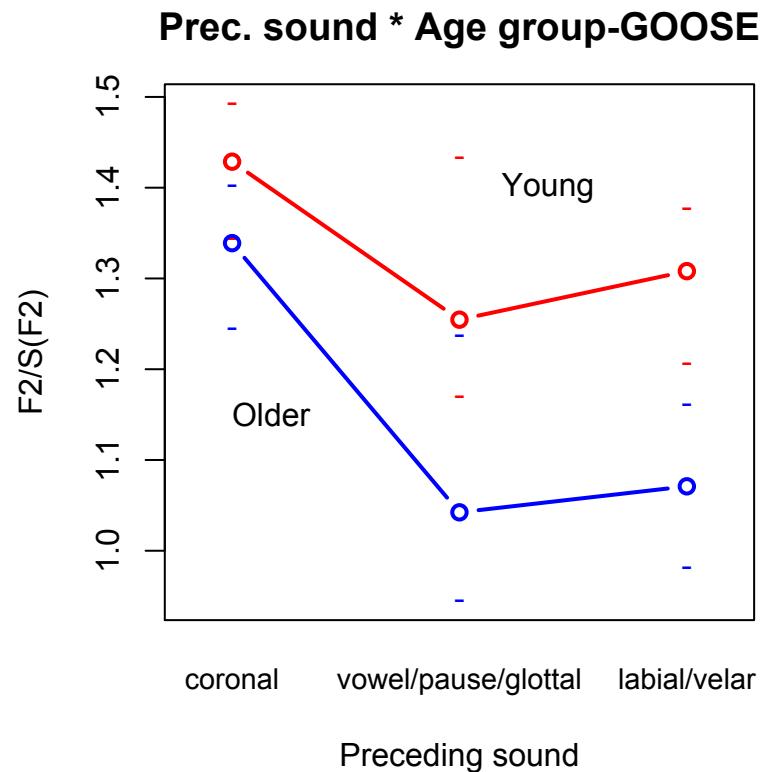
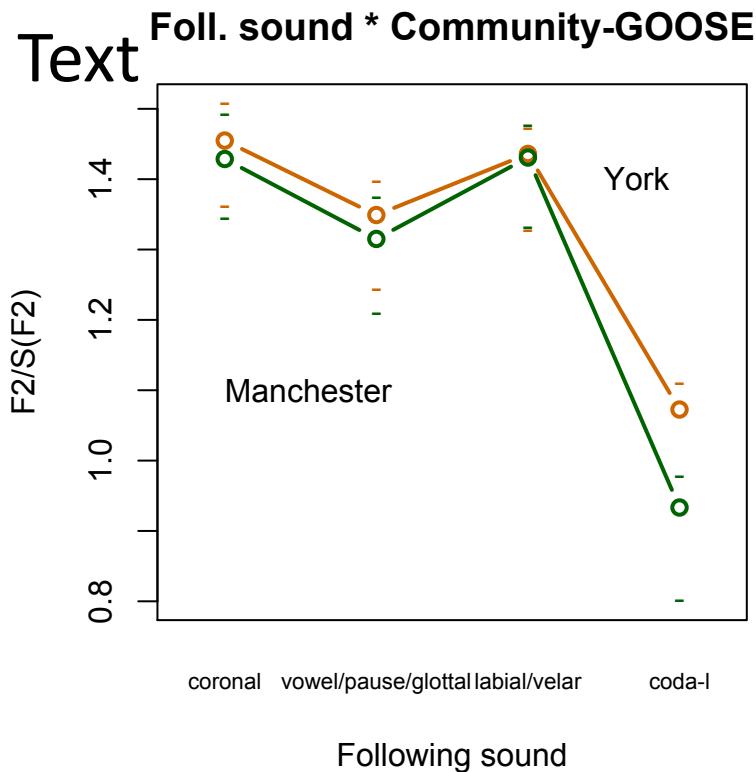
4 Results: GOOSE~GOAT by speaker



4. Results: Contextual effects

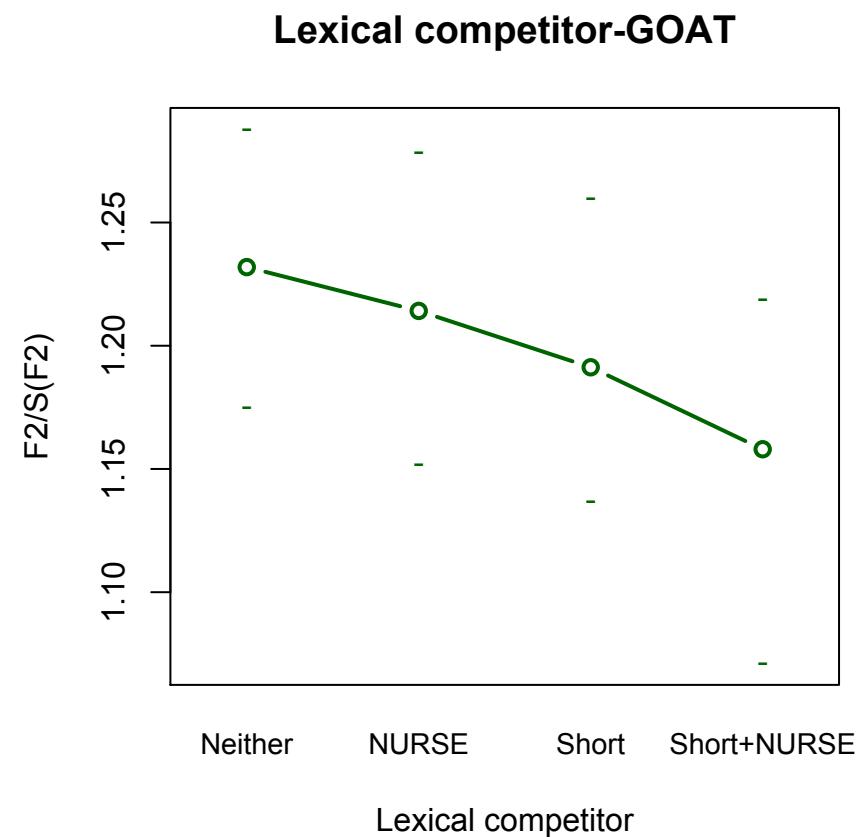
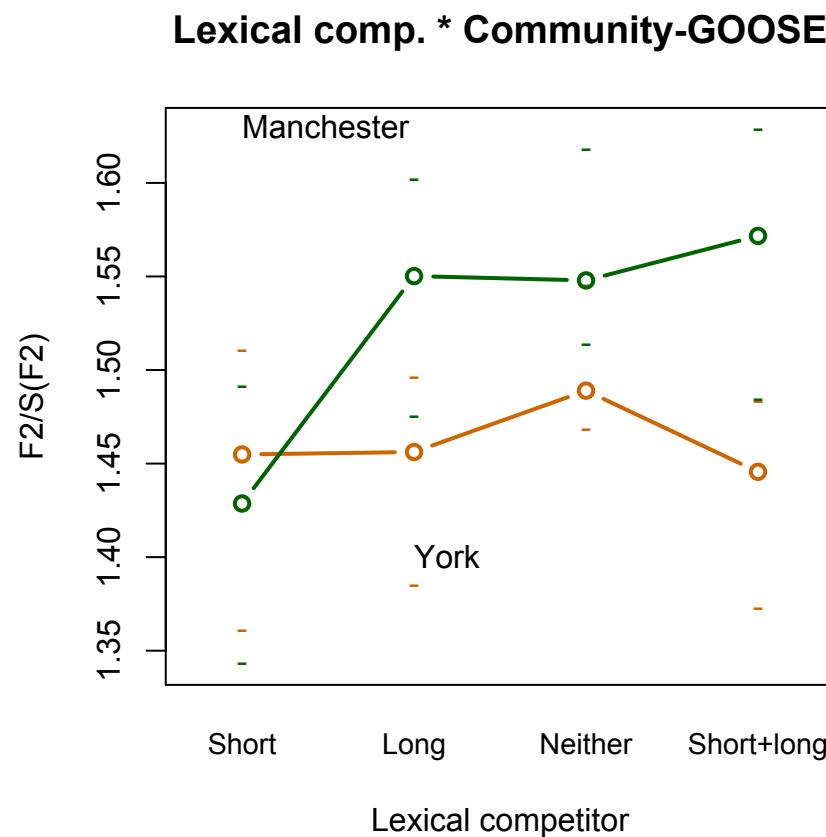
- both cities: similar contextual constraints
 - fronting prohibited pre-/l/
- both cities: GOOSE > GOAT, as predicted by Principle X

4. Results: Contextual effects



4. Results: Contextual effects

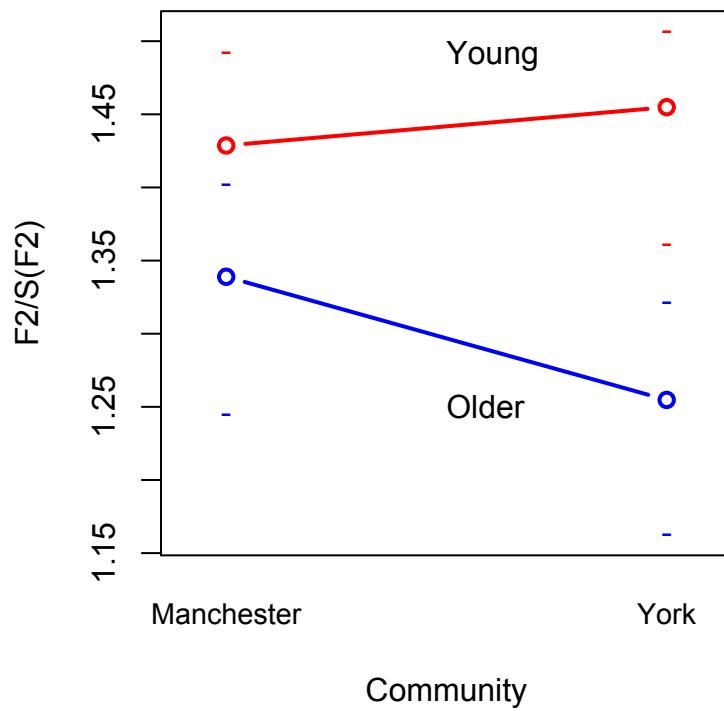
text



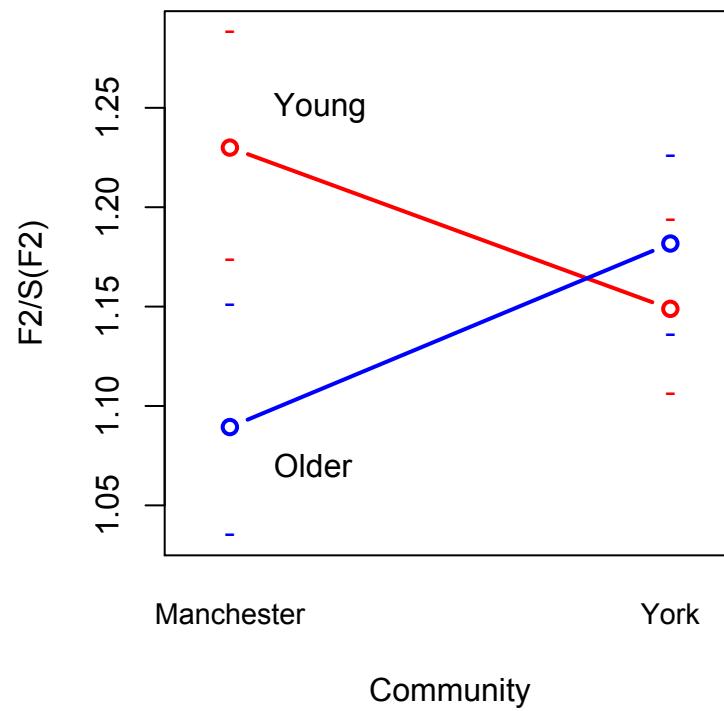
4. Results: Contextual effects

text

Age group * Community-GOOSE

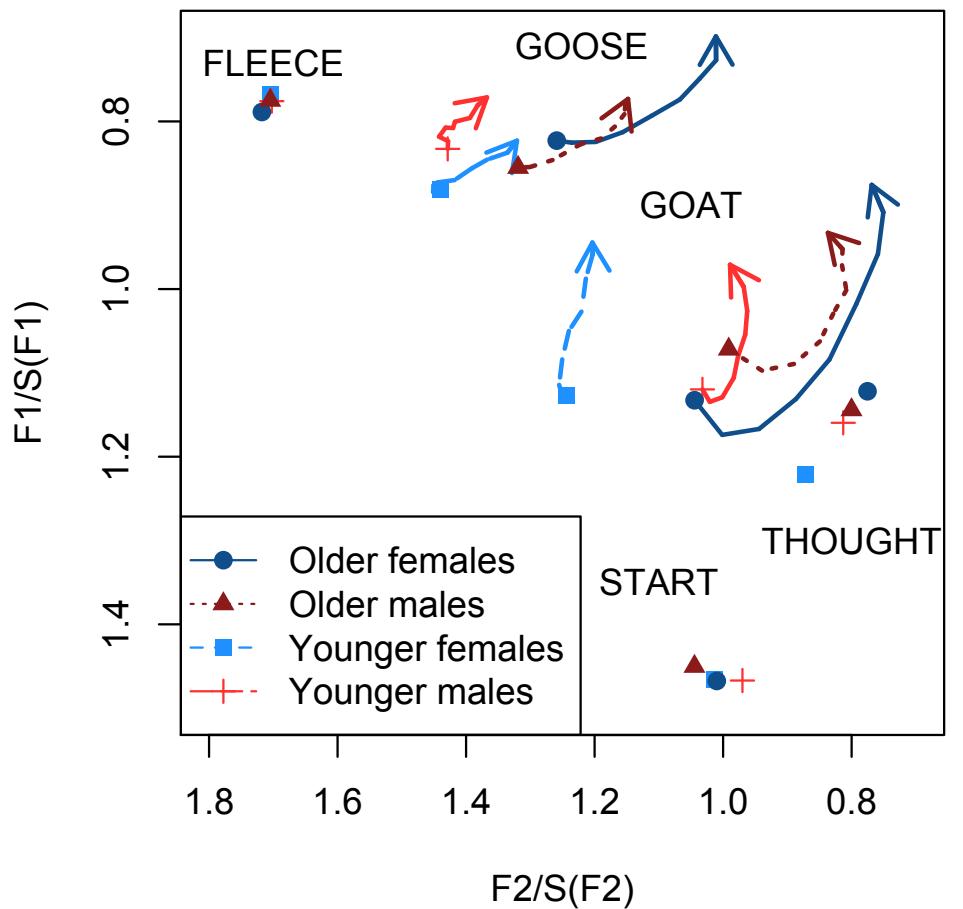


Community * Age group-GOAT

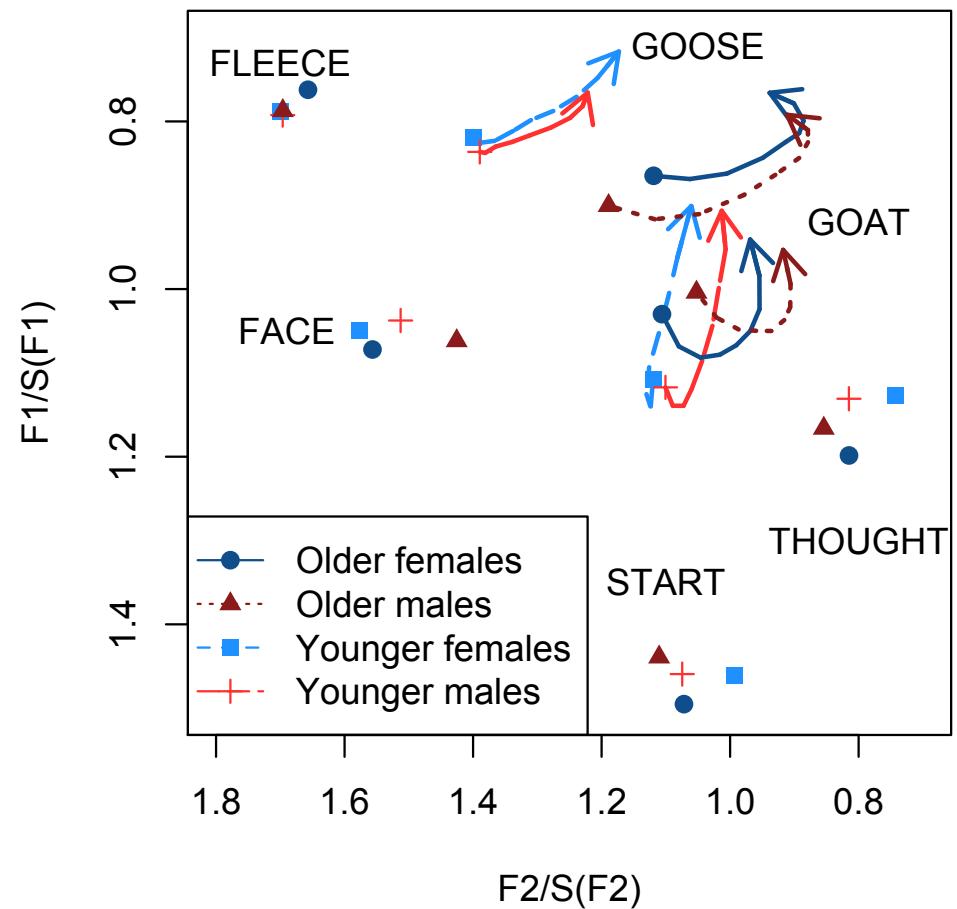


4 Results: Dynamic F1~F2 plots

Manchester



York



5. Discussion and summary

(i) phonetic implementation of fronting:

- increase in F2 for GOOSE/GOAT across both communities
 - fronting more advanced in Manchester
- involving ‘flattening’ of F2 trajectory in both lexical sets in both communities
 - regional dialect levelling? (Watt, Milroy refs?)
 - BUT different interaction with F1 affects Euclidean distance in different ways

5. Discussion and summary

(ii) social correlates

- fronting led by younger speakers
- sex effect for GOAT: change led by females
(consistent with Hall-Lew 2004, Flynn 2011)
- more social baggage for GOAT than GOOSE
 - overt awareness of the speakers?

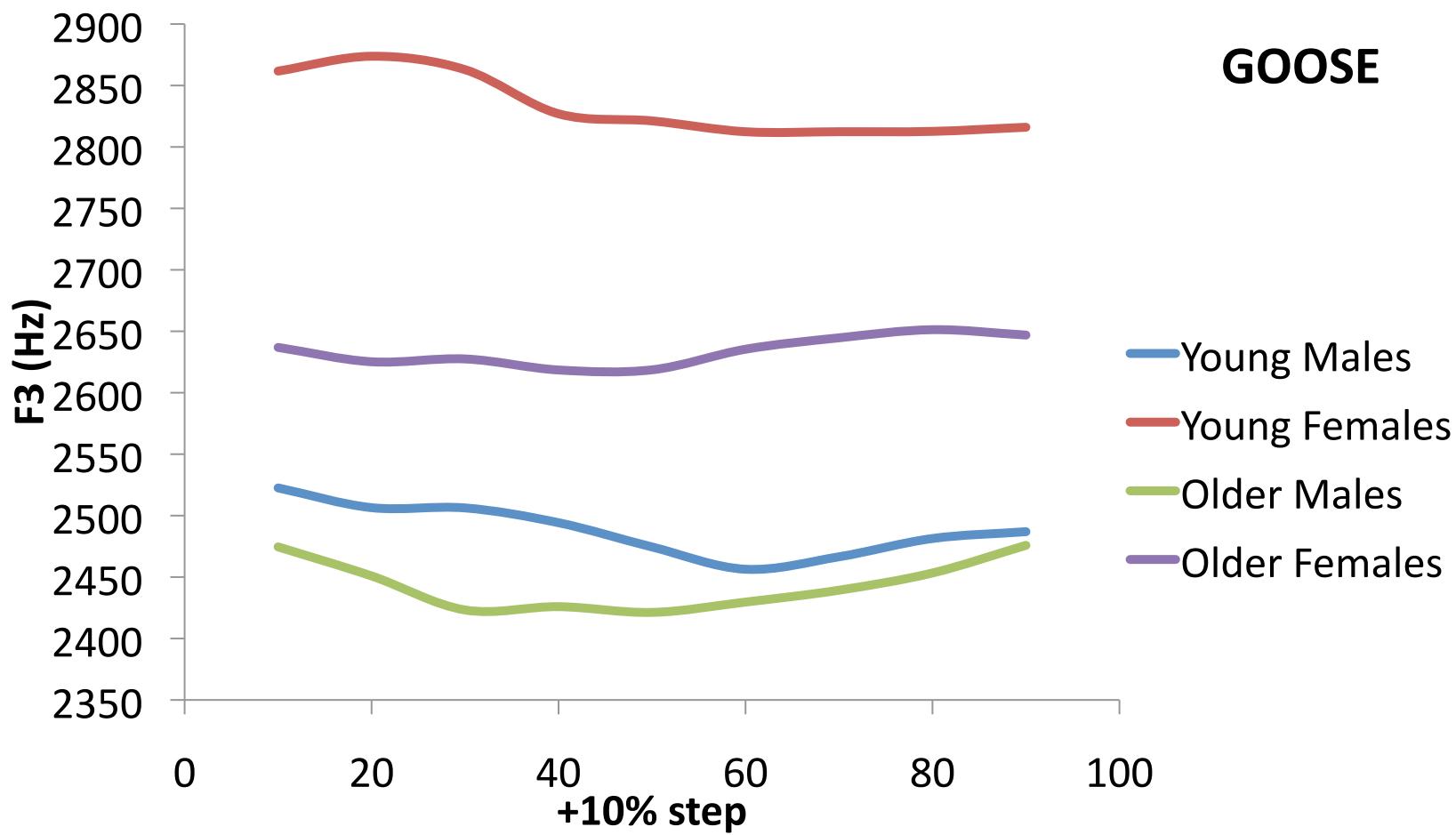
5. Discussion and summary

(iii) articulatory basis

- F3 reveals considerable between-group/-speaker variation in articulatory strategy
 - possible evidence of unrounding for young females
- lack of systematicity within the Manchester speakers
 - acoustic output more important than articulatory implementation

5. Discussion and summary

GOOSE F3



Hughes, Haddican & Foulkes
NWAU 41

5. Discussion and summary

(iv) ‘same’ change?

- Broadly the same social constraints:
 - Age/ sex (for GOAT)
- Similar internal constraints:
 - Pre-l/ post-j
 - But more marked lowering of pre-l F2 GOOSE for younger speakers in Manchester (**L'pool?**)
 - **No community effect for lexical competitor (is this true?)—not really—see slide 16. I'll explain**

5. Discussion and summary

- between-community differences in the way change diffuses according to social factors
- Manchester/ York adhere to Labov's (1994) generalisation
 - GOAT fronting dependent on GOOSE fronting and GOOSE more advanced
 - but differences in the strength of the correlation
 - different patterns from Newcastle (Watt 2002)
 - no ‘Northern English’ pattern

5. Discussion and summary

- differences in the phonetic implementation of GOAT = different social correlates
 - GOAT = diphthongisation in York, compared with monophthongisation in Manchester
 - attitudinal effect (Haddican et al 2011) → GOAT carries more social baggage in York than in Manchester

6. Conclusion

- both within- and between-community differences in the phonetics of fronting
 - evidence against the ‘same change’ across Northern Englishes
 - therefore difficult to find a single underlying explanation—**don’t quite get this...I’d adjust maybe**
- importance of social factors in explaining the heterogeneity of change

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